Natural Resources Canada | Ressources naturelles Canada

# Fuel Focus

*Understanding Gasoline Markets in Canada and Economic Drivers Influencing Prices*

Volume 7, Issue 21

November 2, 2012

Canada

Copies of this publication may be obtained free of charge from:
Natural Resources Canada
Petroleum Resources Branch
580 Booth Street, 17th Floor
Ottawa, Ontario K1A 0E4
Phone: (613) 992-9612
TTY Service: (613) 996-4397 (Teletype for the hearing-impaired)
Fax (613) 992-0614
Email: prb.drp@nrcan-rncan.gc.ca
Web site: http://nrcan.gc.ca/eneene/focinf-eng.php

© Her Majesty the Queen in Right of Canada 2012

ISSN 1918-3321

Aussi offert en français sous le titre *Info-Carburant*

# Fuel Focus

*Volume 7, Issue 21*
November 2, 2012


## National Overview

### Canadian Retail Gasoline Prices Drop for the Third Straight Week to $1.24 per Litre

For the week ending October 30, 2012, Canadian average retail gasoline prices declined by nearly 1 cent per litre to $1.24 per litre compared to the previous week—a 4-month low. Since the last report two weeks ago, average Canadian retail pump prices dropped by nearly 7 cents per litre. Compared to last year at this time, gasoline prices are less than 2 cents per litre higher.

Diesel fuel prices decreased 1 cent per litre from last week to $1.24 per litre. Furnace oil prices declined by nearly 1 cent per litre from the previous week and averaged $1.19 per litre.

Average retail pump prices in Canada reflected lower crude oil prices, which in turn pushed down North American wholesale gasoline prices.

## *Recent Developments*

- **U.S. Could Become World's Top Oil Producer**: U.S. oil output is surging so fast that the United States could soon overtake Saudi Arabia as the world's biggest producer. Driven by high prices and new drilling methods, U.S. production of crude and other liquid hydrocarbons is on track to rise 7% this year to an average of 10.9 million barrels per day. This will be the fourth straight year of crude increases and the biggest single-year gain since 1951. The U.S. Energy Department forecasts that U.S. production of crude and other liquid hydrocarbons, which includes biofuels, will average 11.4 million barrels per day next year. That would be a record for the U.S. and just below Saudi Arabia's output of 11.6 million barrels. (Source : http://hosted2.ap.org/vabrm/nationalworld/Article_2012-10-23-US%20Oil%20Boom/id-15afe4569b714eb680b0f3fe2be4fbeb )

- **Domestic Gasoline Sales Up 5%:** Motor gasoline sales increased 5% to 27 billion litres in the first seven months of 2012 compared to the same period in 2011. Since the beginning of the year, gasoline sales have remained consistently above those of the last five years. Diesel fuel sales rose 3% to 17 billion litres, while light fuel oil (furnace oil) decreased 12% to 1.9 billion litres in the same time period. (Source: NRCan and Statistics Canada)

**Figure 1: Crude Oil and Regular Gasoline Price Comparison (National Average)**

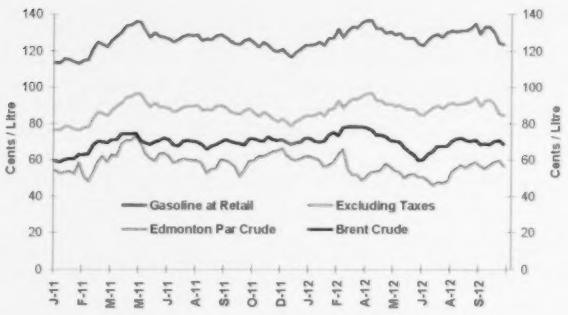
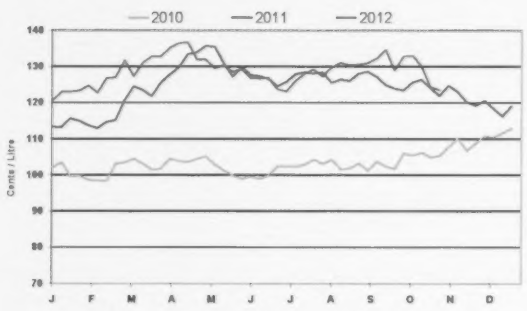



**Figure 2: Weekly Regular Gasoline Prices**




**Changes in Fuel Prices**

| | Week of: | Change from: | |
|---|---|---|---|
| ¢/L | 2012-10-30 | Previous Week | Last Year |
| Gasoline | 123.5 | -0.8 | +1.6 |
| Diesel | 124.2 | -1.0 | -7.8 |
| Furnace Oil | 119.1 | -0.7 | +4.4 |

*Source: NRCan*

## In this Issue


| | page |
|---|---|
| *National Overview* | 1 |
| *Recent Developments* | 1 |
| *Retail Gasoline Overview* | 2 |
| *Wholesale Prices* | 3 |
| *Refining and Marketing Margins* | 4 |
| *Crude Oil Overview* | 5 |

## Retail Gasoline Overview

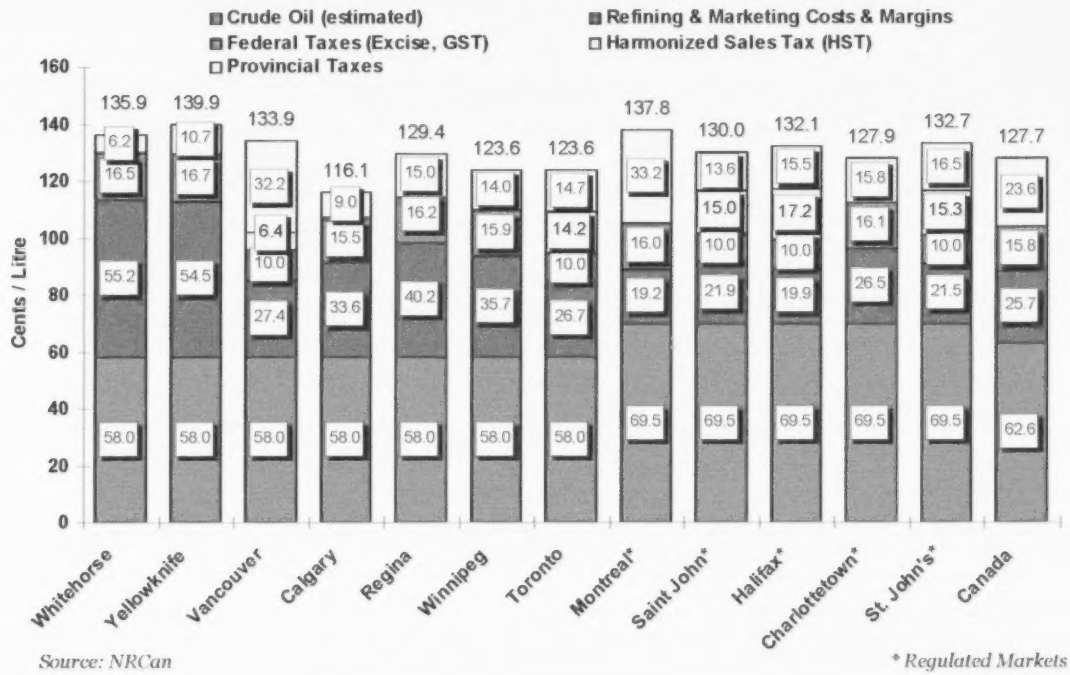
For the period ending October 30, 2012, the **four-week average** regular gasoline pump price in selected cities across Canada was $1.28 per litre, a decrease of more than 3 cents per litre compared to the previous report of October 19, 2012. Compared to the same period in 2011, the average Canadian pump price is 3 cents per litre higher.

The **four-week average** crude component was 63 cents per litre, an increase of nearly 1 cent per litre compared to two weeks ago.

Retail gasoline prices in most Western centres—Vancouver to Winnipeg—decreased by 2 cents per litre when compared to the previous report and ranged from $1.16 to $1.34 per litre. Prices in Eastern cities—Toronto to St. John's—decreased by 4 cents per litre, and ranged from $1.24 per litre to $1.38 per litre.

At the national level, refining and marketing costs and margins decreased by 4 cents per litre to 26 cents per litre from the previous report two weeks ago. This is 3 cents per litre higher than during the same period last year.

**Figure 3: Regular Gasoline Pump Prices in Selected Cities**
**Four-Week Average (October 9 to 30, 2012)**




*Source: NRCan*

** Regulated Markets*

### Inflation Rose 1.2% in September 2012

Statistics Canada's Consumer Price Index (CPI) report released September 2012 indicates that consumer prices rose 1.2% in the 12 months to September, matching the increase in August. Higher energy prices, particularly for gasoline and electricity, led the advance in the CPI for September.

Gasoline prices rose 4.7% in the 12 months to September, following a 2.2% gain the previous month. Compared with August, higher year-over-year price increases for gasoline were recorded in eight provinces, most notably in the Atlantic region.

Prices for transportation rose 1.6% in the 12 months to September, after rising 1.8% in August. The advance in the transportation component in September was led by higher prices for gasoline. This was tempered by lower year-over-year price increases for the purchase of passenger vehicles.

Source: Statistics Canada, The Daily, http://www.statcan.gc.ca/daily-quotidien/121019/dq121019a-eng.htm

## Wholesale Gasoline Prices

For the week **ending October 25, 2012**, wholesale gasoline prices decreased in nine of the ten selected Canadian and American centres compared to the previous week. Overall, wholesale price changes ranged from a decrease of 6 cents per litre to an increase of 1 cent per litre.

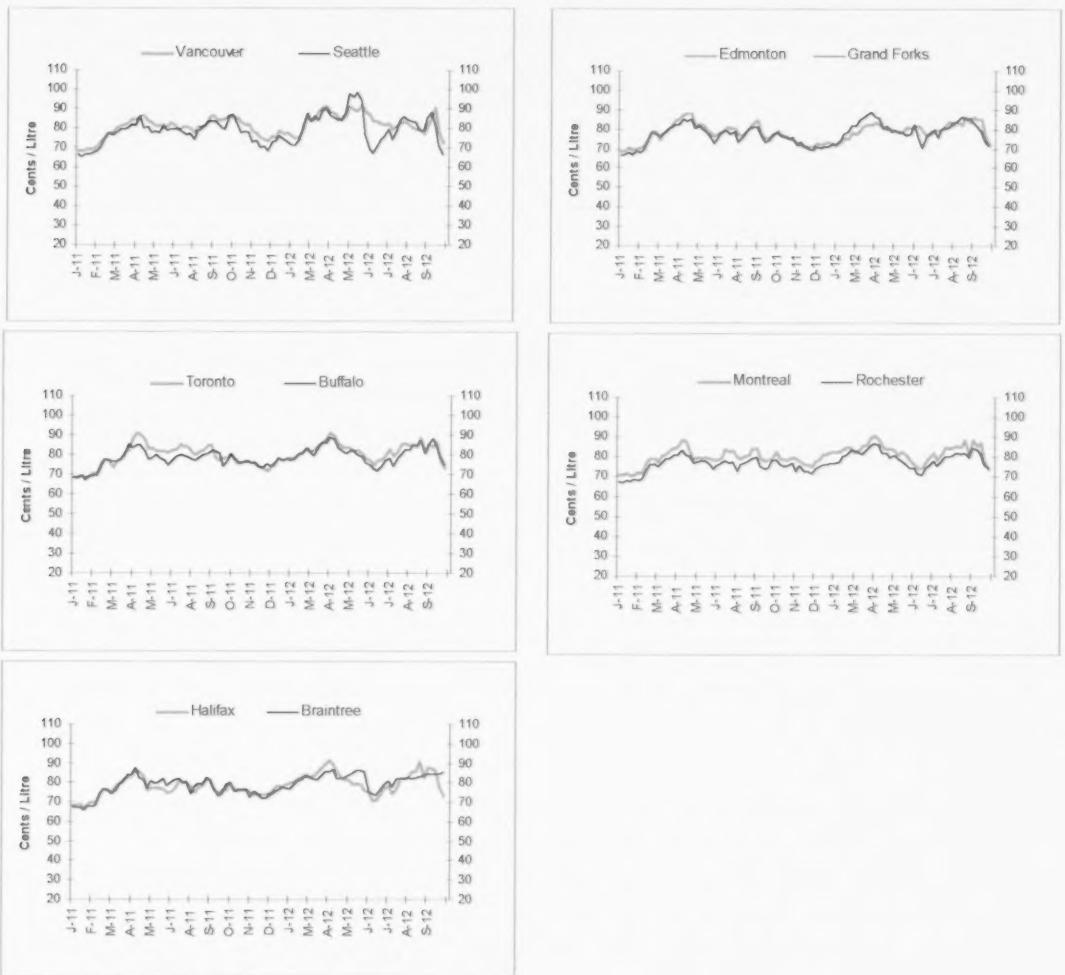
Wholesale gasoline price changes in the Eastern centres, for both Canadian and American centres, ranged from an increase of 1 cent per litre to a decrease of 5 cents per litre. Prices ended between 73 and 85 cents per litre.

In the Western centres, price decreases ranged from 2 to 6 cents per litre, with prices closing at 66 to 72 cents per litre.

In the last four weeks, wholesale prices in most Canadian and American centres have declined in the range of 9 to 19 cents per litre.

Overall, wholesale prices in most selected centres are between 1 and 11 cents per litre lower than they were at this time last year.

**Figure 4: Wholesale Gasoline Prices**
Rack Terminal Prices for Selected Canadian and American Cities Ending October 25, 2012
(Can ¢/L)




*Sources: NRCan, Bloomberg Oil Buyers Guide*

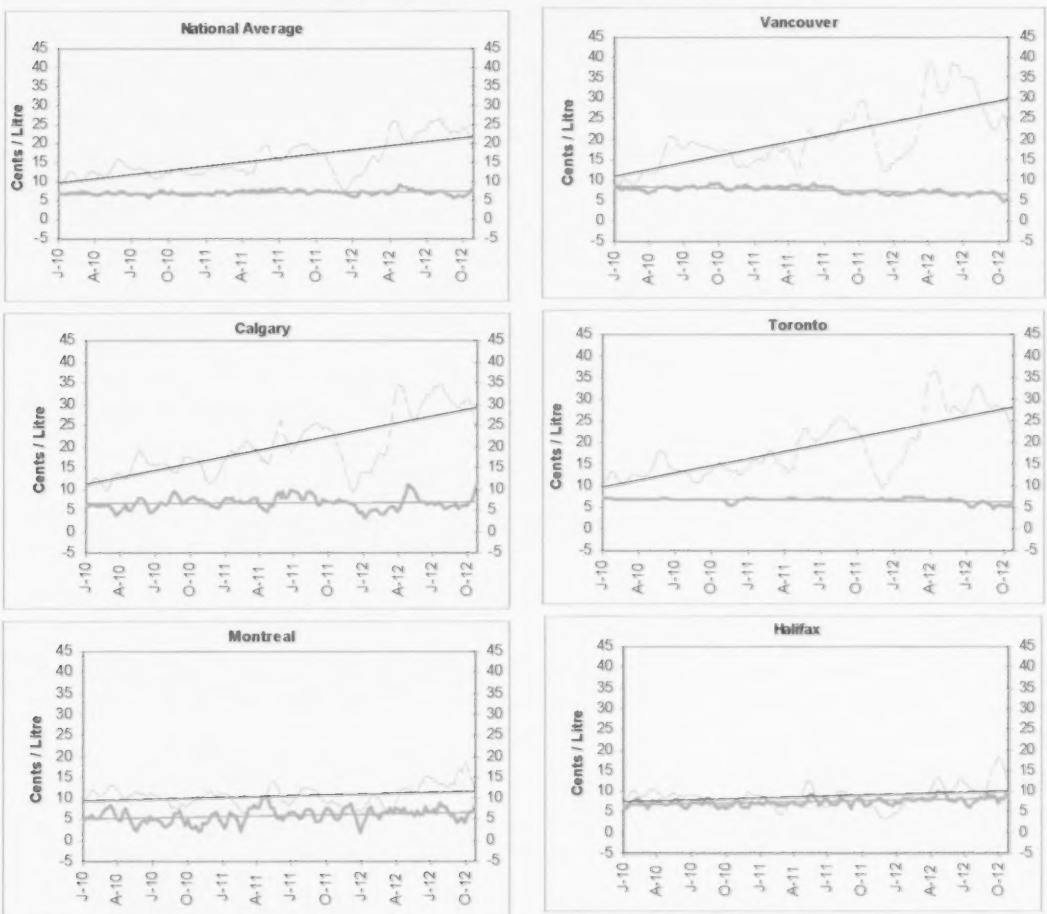
## Gasoline Refining and Marketing Margins

**Gasoline refining and marketing margins** calculated in our Fuel Focus reports are four-week rolling averages. The refining margins shown here are calculated as the wholesale price of gasoline (rack price) in an area, less the estimated refinery crude oil price for that area. Thus, 2 elements contribute to refining margin levels – rack prices and crude input costs. Each is driven by its own set of influences.

Wholesale gasoline prices shown in Fuel Focus Figure 4 are at similar levels in all selected centres, reflecting the integrated nature of the continental gasoline market. Wholesale (rack) gasoline prices in Western Canada typically track prices in Eastern Canada and other adjacent markets. Trans-regional pipelines exist which can carry refined products away from Western Canada. Because of this, western Canadian wholesale prices must reflect prices in adjacent markets in order to retain gasoline supply in Western Canada. If they did not, suppliers would export gasoline to other higher-priced markets, leaving insufficient supply in Western Canada.

Regional North American crude oil input costs to refineries do not track each other. There is an oversupply of North American crude oil in the middle of the continent (Alberta through Oklahoma). This oversupply, combined with inadequate pipeline capacity to take oil away from this area to other markets, has resulted in lower prices for Edmonton Par compared to global crudes like Brent. We assume Edmonton Par is representative of oil input costs for Western Canadian refineries, while Brent is representative of input costs for refineries east of Nanticoke. Thus, calculated refining margins are much higher for western Canadian refineries than for those in Eastern Canada. Refining margins in Western Canadian centres and Toronto have been consistently higher than in Montreal and Halifax since early 2010.

**Figure 5: Gasoline Refining and Marketing Margins**
Four-Week Rolling Average Ending October 30, 2012
------- Refining Margin —— Marketing Margin



# Crude Oil Overview

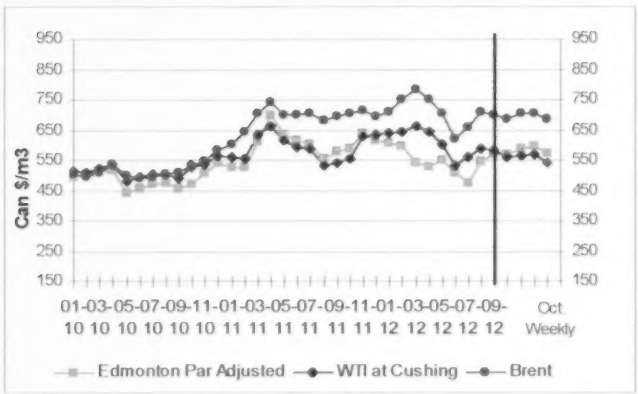
## Global Crude Oil Prices Move Downward

For the week ending October 26, 2012, prices for the three marker crudes averaged between $541/m³ and $685/m³ (US$86 to US$110 per barrel). Prices declined in the range of $19/m³ to $26/m³ for Brent and WTI, respectively, from the previous week. In the last four weeks, Edmonton Par has traded at a premium to WTI in the range of $7/m³ to $30/m³ (US$1 to US$5 per barrel).

Global crude oil prices eased downward in the last few weeks spurred by concerns over the global economic slowdown. U.S. crude oil inventories remain strong and above their five-year historical average while demand for gasoline continues to decline with the approach of the winter season, as refiners turn to producing heating fuel.

The expected arrival of Hurricane Sandy on the eastern U.S. coast, shortly after the report ending October 26, 2012, caused energy markets to trade cautiously due to uncertainties over the Hurricane's path and the potential damage to oil-related infrastructures.

**Figure 6: Crude Oil Price Comparisons**




**Changes in Crude Oil Prices**

| Crude Oil Types | Week Ending: 2012-10-26 | | Change From: | | | |
|---|---|---|---|---|---|---|
| | | | Previous Week | | Last Year | |
| | $Can/m³ | $US/bbl | $Can/m³ | $US/bbl | $Can/m³ | $US/bbl |
| Edmonton Par | 571.71 | 91.35 | -24.33 | -5.00 | -44.17 | -6.21 |
| WTI | 541.16 | 86.47 | -25.72 | -5.17 | -41.67 | -5.86 |
| Brent | 685.44 | 109.52 | -19.30 | -4.41 | -20.72 | -2.34 |

*Source: NRCan*

### Attributes of Crude Oil at U.S. Refineries Vary by Region

Crude oil has unique qualities and commands different prices depending on these qualities. Two key characteristics of crude oil are density and sulfur content. Density ranges from light to heavy, while sulfur content is characterized as sweet or sour. The purchase costs of various crude oils depend mainly on density and sulfur content, and other factors such as location and transportation costs.

Refining capacity in the Gulf Coast has large secondary conversion capacity including hydrocrackers, cokers, and desulfurization units. These units can process heavy, high sulfur crude oils that typically sell at a discount to light, low sulfur (sweet) crudes like Brent. Many East Coast refineries have less secondary conversion capacity, and in general they process crude oil with lower sulfur content and a lighter density. This lighter, lower sulfur crude oil commands a premium price on world markets.

In recent years, crude production has risen dramatically in Canada (heavy, sour crude) and the United States (high-quality light, sweet crude), providing these types of oil to U.S. refiners. The new U.S. production often sells at a discount to poorer quality crudes because of storage and transportation constraints. Refineries across the country are developing strategies to acquire the new domestic crude streams to replace more expensive imports of high-quality crude oil. Gulf Coast refiners are also seeking more access to Canadian crudes to replace declining supplies of heavy, sour crudes from Mexico and Venezuela.

Source: U.S. EIA, http://www.eia.gov/todayinenergy/detail.cfm?id=8130